

**A NEW SPECIES OF BRACONIDAE (HYMENOPTERA) FROM MEXICO
INTRODUCED INTO TEXAS TO CONTROL A SUGAR CANE BORER,
EOREUMA LOFTINI (LEPIDOPTERA: PYRALIDAE)**

PAUL M. MARSH

Systematic Entomology Laboratory, IIBIII, Agricultural Research Service, U.S.
Department of Agriculture, Beltsville, Maryland 20705.

Abstract.—A new species of Braconidae, *Allorhogas pyralophagus* Marsh, is described from Mexico. This parasitoid attacks larvae of a pyralid moth, *Eoreuma loftini*, on sugarcane, and is being introduced against this pest in Texas.

Specimens of a braconid parasitizing *Eoreuma loftini* (Dyar) (Lepidoptera: Pyralidae) were collected from Johnson grass stems, *Sorghum halepense* (L.), in Monterrey, N.L., Mexico in 1981 by F. D. Bennett, Commonwealth Institute of Biological Control (CIBC), Trinidad. A laboratory colony of the parasite was established in Trinidad on *Diatraea saccharalis* (F.) (Lepidoptera: Pyralidae). Subsequent expeditions to Monterrey, N.L. (1982), Culiacan and Los Mochis, Sinaloa (1983) by Texas A & M University and the CIBC secured more specimens that were colonized in College Station, Texas.

Currently this parasite is being released in the lower Rio Grande Valley of Texas for suppression of *E. loftini* on sugarcane, corn and grain sorghum. Field recoveries have been made for the past two years. Biological and ecological studies on this parasite are being conducted by J. W. Smith, Jr., and H. W. Browning of Texas A & M University. In addition to Texas, the parasite has been sent by CIBC to South America, Pakistan, and Africa for release against several species of pyralid stalk borers.

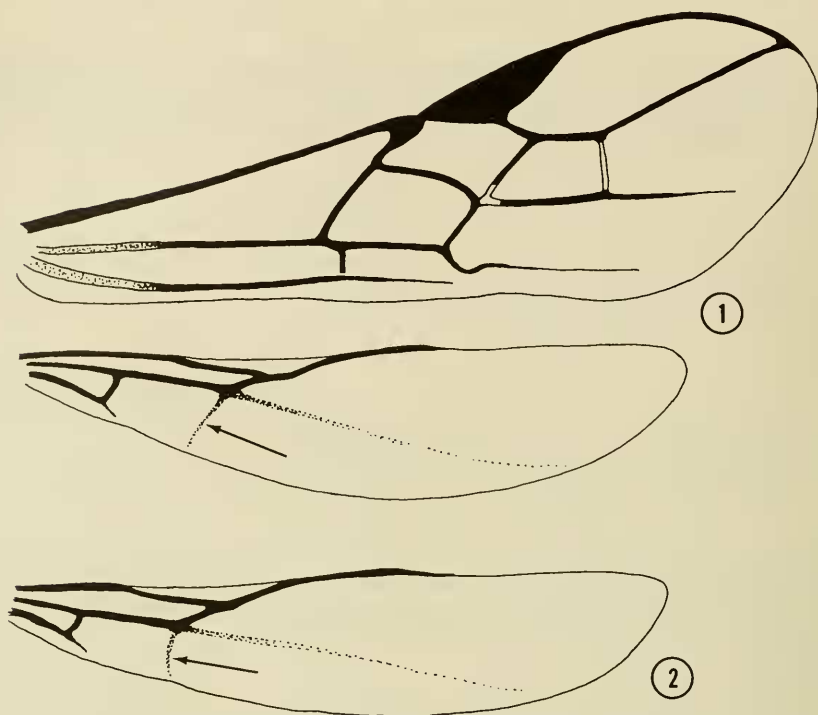
Specimens submitted to the Systematic Entomology Laboratory, USDA, by CIBC and Texas A&M were identified by me as *Allorhogas* sp. Because the species now appears to have potential for control of sugar cane stem borers, a name is provided here.

The inclusion of this new species in *Allorhogas* broadens the generic definition somewhat. The distinguishing character of the genus is the postnervellus of the hindwing; it is either perpendicular to the mediellen as in this new species (Fig. 1) or more often curves distinctly toward the wing tip as in the type-species, *A. gallicola* Gahan (Fig. 2). There are many undescribed species from the Western Hemisphere, and a thorough study of all included species is necessary before exact generic limits can be established.

***Allorhogas pyralophagus* Marsh, NEW SPECIES**

Figs. 1, 3-8

Female.—Length of body, 3.5-4.5 mm; ovipositor, 1.0-1.5 mm. Color: body entirely honey yellow; legs often yellowish-white; ovipositor and apical flagello-

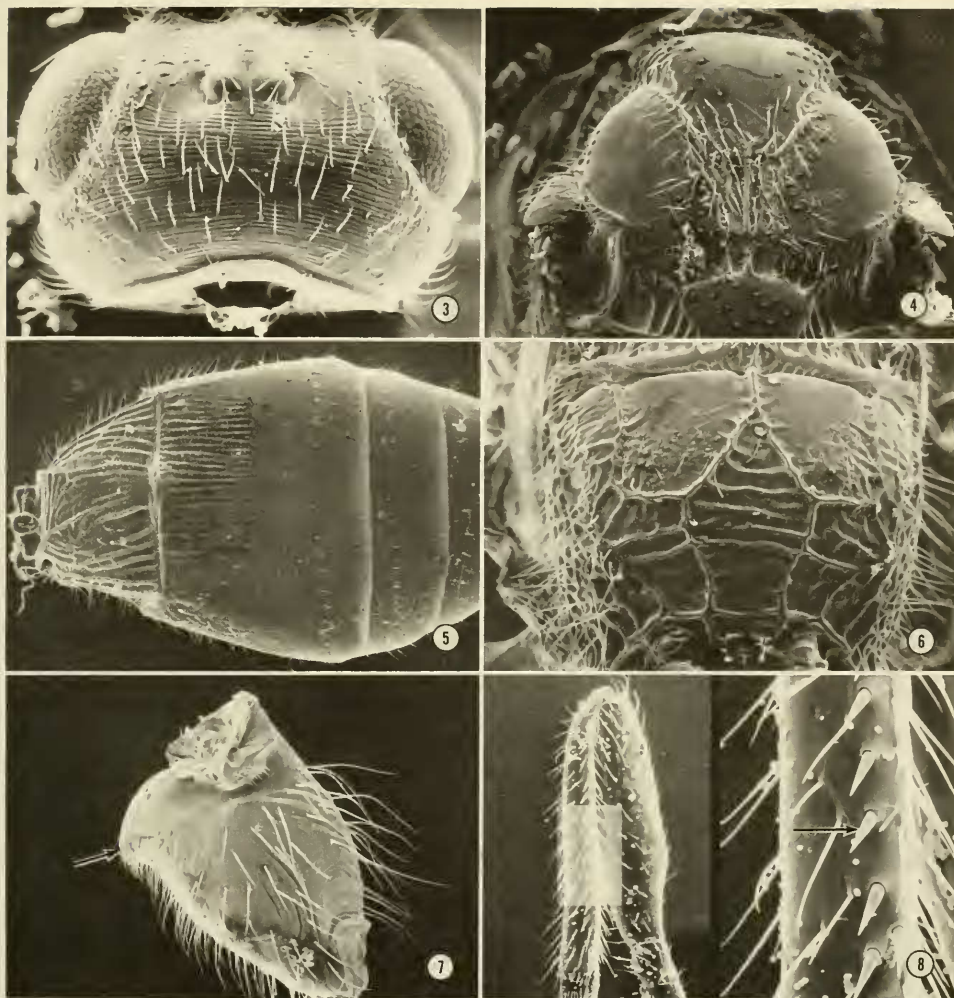


Figs. 1-2. Wings of *Allorhogas* spp. 1, Fore and hindwing of *A. pyralophagus* Marsh, n. sp. 2, Hindwing of *A. gallicola* Gahan.

meres brown; mesopleuron occasionally marked with brown along sternaulus; first and second abdominal terga often brown medially; wing veins brown, stigma honey yellow.

Head: vertex strigate (Fig. 3); face medially, frons and temples smooth; ocelli small, ocellocular distance at least three times length of lateral ocellus; 24-26 flagellomeres. *Thorax*: mesonotal lobes smooth; notauli scrobiculate anteriorly, meeting posteriorly in wide strigate area (Fig. 4); scutellar disc smooth, scutellar furrow wide, with 5-7 cross carinae; mesopleural disc smooth, sternaulus smooth or rarely finely scrobiculate, anterior corner of mesopleuron rugose; propodeum rugose laterally, strigate-rugose dorsally with strong carinae forming distinct central triangular areola, areola with transverse rugae, basal triangular areas smooth (Fig. 6). *Abdomen* (Fig. 5): first tergum with width at apex greater than length, costate, smooth basally between lateral costae; second tergum costate; remainder of terga smooth; ovipositor $\frac{1}{2}$ as long as abdomen. *Legs*: hind coxae ventrally with broad tooth at base (Fig. 7); fore-tibia with row of 8-10 stout spines along anterior edge (Fig. 8). *Wings* (Fig. 1): first segment of radius of forewing $\frac{2}{3}$ length of second segment, second segment slightly shorter than first intercubitus; postnervellus of hindwing perpendicular to mediellan, and parallel to nervellus; first segment of mediellan about as long as second segment.

Male.—Essentially as in female except for sexual characters; body length 3.0-4.0 mm; 22-24 flagellomeres.



Figs. 3–8. *Allorhogas pyralophagus* Marsh, n.sp. 3, Vertex. 4, Mesonotum. 5, Abdomen. 6, Propeum. 7, Hind coxa. 8, Fore tibia.

Holotype ♀.—Mexico, Monterrey, ex *Acigona loftini*, Coll. V-1981, F. D. Bennett; in culture on *Diatraea*, CIBC, Trinidad, IV-1982, M. J. W. Cook. Deposited in U.S. National Museum of Natural History, Washington, D.C. (USNM).

Paratypes.—18 ♀♀, 5 ♂♂, same data as holotype; 8 ♀♀, 2 ♂♂, Pakistan, Rawalpindi, lab. culture V-27-82, reared on *Chilo partellus* in Sorghum (this culture originated from the laboratory culture in Trinidad established from the original collection in Mexico); 2 ♀♀, 2 ♂♂, Texas, College Station, lab. culture Aug. 83, originally from Mexico, Sinaloa (various localities), V-1983; 5 ♀♀, 2 ♂♂, Texas, College Station, lab. colony April 82, originally from Monterrey, Mexico. Paratypes deposited in: USNM; Texas A&M University, College Station, Texas; CIBC, London, England, and Rawalpindi, Pakistan.